

03C0 #11



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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/021,818

DATE: 08/12/2002

TIME: 15:12:02

Input Set : A:\seq list.ST25.txt

Output Set: N:\CRF4\08122002\J021818.raw

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3 <110> APPLICANT: Davis, Ronald W.
4   Vaillancourt, Peter
6 <120> TITLE OF INVENTION: Dimeric Fluorescent Polypeptides
8 <130> FILE REFERENCE: 25436/1652
10 <140> CURRENT APPLICATION NUMBER: US 10/021,818
C--> 11 <141> CURRENT FILING DATE: 2002-08-06
13 <150> PRIOR APPLICATION NUMBER: US 60/256,121
14 <151> PRIOR FILING DATE: 2000-12-15
16 <160> NUMBER OF SEQ ID NOS: 8
18 <170> SOFTWARE: PatentIn version 3.1
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 720
22 <212> TYPE: DNA
23 <213> ORGANISM: Renilla reniformis
25 <400> SEQUENCE: 1
26 atggtgagta aacaaatatt gaagaacact ggattgcagg agatcatgtc gtttaaagtg      60
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30 attttattcg gaaaccaact gggttcagatt cgtgtcacia aaggggtccc gcttccattt      180
32 gcatttgata ttctctcacc agctttccaa tacggcaacc gtacattcac gaaatacccg      240
34 gaggatatat cagacttttt tataacaatca tttccagcgg gatttgata cgaaagaacg      300
36 ttgcgttacg aagatgggtg actggttgaa atccgttcag atataaattt aatcgaggag      360
38 atgtttgtct acagagtggg atataaagggt agtaacttcc cgaatgatgg tccagtgatg      420
40 aagaagacaa tcacaggatt acaaccttcg ttccaagtgg tgtatatgaa cgaatggcgtc      480
42 ttggttggcc aagtcattct tgtttataga ttaaactctg gcaaatttta ttctgtgtcac      540
44 atgagaacac tgatgaaatc aaaggggtgta gtgaaggatt ttcccgaata ccatttcatt      600
46 caacatcggt tagagaagac tgatgtggaa gacggagggt ttgttgagca acacgagacg      660
48 gccattgctc aactgacatc gctggggaaa ccacttggtt ccttacacga atgggtttta      720
51 <210> SEQ ID NO: 2
52 <211> LENGTH: 238
53 <212> TYPE: PRT
54 <213> ORGANISM: Renilla reniformis
56 <400> SEQUENCE: 2
58 Met Ser Lys Gln Ile Leu Lys Asn Thr Gly Leu Gln Glu Ile Met Ser
59 1           5           10           15
62 Phe Lys Val Asn Leu Glu Gly Val Val Asn Asn His Val Phe Thr Met
63           20           25           30
66 Glu Gly Cys Gly Lys Gly Asn Ile Leu Phe Gly Asn Gln Leu Val Gln
67           35           40           45
70 Ile Arg Val Thr Lys Gly Val Pro Leu Pro Phe Ala Phe Asp Ile Leu
71           50           55           60
74 Ser Pro Ala Phe Gln Tyr Gly Asn Arg Thr Phe Thr Lys Tyr Pro Glu
75 65           70           75           80
78 Asp Ile Ser Asp Phe Phe Ile Gln Ser Phe Pro Ala Gly Phe Val Tyr

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79          85          90          95
82 Glu Arg Thr Leu Arg Tyr Glu Asp Gly Gly Leu Val Glu Ile Arg Ser
83          100          105          110
86 Asp Ile Asn Leu Ile Glu Glu Met Phe Val Tyr Arg Val Glu Tyr Lys
87          115          120          125
90 Gly Ser Asn Phe Pro Asn Asp Gly Pro Val Met Lys Lys Thr Ile Thr
91          130          135          140
94 Gly Leu Gln Pro Ser Phe Glu Val Val Tyr Met Asn Asp Gly Val Leu
95 145          150          155          160
98 Val Gly Gln Val Ile Leu Val Tyr Arg Leu Asn Ser Gly Lys Phe Tyr
99          165          170          175
102 Ser Cys His Met Arg Thr Leu Met Lys Ser Lys Gly Val Val Lys Asp
103          180          185          190
106 Phe Pro Glu Tyr His Phe Ile Gln His Arg Leu Glu Lys Thr Asp Val
107          195          200          205
110 Glu Asp Gly Gly Phe Val Glu Gln His Glu Thr Ala Ile Ala Gln Leu
111          210          215          220
114 Thr Ser Leu Gly Lys Pro Leu Gly Ser Leu His Glu Trp Val
115 225          230          235
118 <210> SEQ ID NO: 3
119 <211> LENGTH: 720
120 <212> TYPE: DNA
121 <213> ORGANISM: Artificial sequence
123 <220> FEATURE:
124 <223> OTHER INFORMATION: R. reniformis GFP polynucleotide sequence adapted to
humanize cod
125      on usage
127 <400> SEQUENCE: 3
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130 aacctggagg gcatcgtgaa caaccacgtg ttcacatgg agggctgcgg caagggaac      120
132 atcctgttcg gcaaccagct ggtgcagatc cgcgtgacca agggcgcccc cctgcccttc      180
134 gccttcgaca tcgtgagccc cgccttcagg tacggcaacc gcaccttcac caagtacccc      240
136 aacgacatca gcgactactt catccagagc tccccgcgg gcttcatgta cgagcgcacc      300
138 ctgcgctacg aggacggcgg cctggtggag atccgcagcg acatcaacct gatcgaggac      360
140 aagttcgtgt accgcgtgga gtacaagggc agcaacttcc ccgacgacgg ccccgatgatg      420
142 cagaagacca tcctgggcat cgagcccagc ttcgaggcca tgtacatgaa caacggcggtg      480
144 ctggtgggcg aggtgatcct ggtgtacaag ctgaacagcg gcaagtacta cagctgccac      540
146 atgaagaccc tgatgaagag caaggcggtg gtgaaggagt tccccctcta ccacttcac      600
148 cagcaccgcc tggagaagac ctacgtggag gacggcggtc tcgtggagca gcacgagacc      660
150 gccatcgccc agatgaccag catcggaag cccctgggca gctgcacga gtgggtgtaa      720
153 <210> SEQ ID NO: 4
154 <211> LENGTH: 239
155 <212> TYPE: PRT
156 <213> ORGANISM: Artificial sequence
158 <220> FEATURE:
159 <223> OTHER INFORMATION: Sequence of R. reniformis GFP polypeptide encoded by
humanized R.
160      reniformis GFP polynucleotide sequence
162 <400> SEQUENCE: 4
164 Met Val Ser Lys Gln Ile Leu Lys Asn Thr Gly Leu Gln Glu Ile Met
165 1          5          10          15

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168 Ser Phe Lys Val Asn Leu Glu Gly Val Val Asn Asn His Val Phe Thr
169                20                25                30
172 Met Glu Gly Cys Gly Lys Gly Asn Ile Leu Phe Gly Asn Gln Leu Val
173                35                40                45
176 Gln Ile Arg Val Thr Lys Gly Ala Pro Leu Pro Phe Ala Phe Asp Ile
177                50                55                60
180 Leu Ser Pro Ala Phe Gln Tyr Gly Asn Arg Thr Phe Thr Lys Tyr Pro
181 65                70                75                80
184 Glu Asp Ile Ser Asp Phe Phe Ile Gln Ser Phe Pro Ala Gly Phe Val
185                85                90                95
188 Thr Glu Arg Thr Leu Arg Tyr Glu Asp Gly Gly Leu Val Glu Ile Arg
189                100               105               110
192 Ser Asp Ile Asn Leu Ile Glu Glu Met Phe Val Tyr Arg Val Glu Tyr
193                115               120               125
196 Lys Gly Ser Asn Phe Pro Asn Asp Gly Pro Val Met Lys Lys Thr Ile
197                130               135               140
200 Thr Gly Leu Gln Pro Ser Phe Glu Val Val Tyr Met Asn Asp Gly Val
201 145               150               155               160
204 Leu Val Gly Gln Val Ile Leu Val Tyr Arg Leu Asn Ser Gly Lys Phe
205                165               170               175
208 Tyr Ser Cys His Met Arg Thr Leu Met Lys Ser Lys Gly Val Val Lys
209                180               185               190
212 Asp Phe Pro Glu Tyr His Phe Ile Gln His Arg Leu Glu Lys Thr Tyr
213                195               200               205
216 Val Glu Asp Gly Gly Phe Val Glu Gln His Glu Thr Ala Ile Ala Gln
217                210               215               220
220 Leu Thr Ser Leu Gly Lys Pro Leu Gly Ser Leu His Glu Trp Val
221 225               230               235
224 <210> SEQ ID NO: 5
225 <211> LENGTH: 10
226 <212> TYPE: PRT
227 <213> ORGANISM: Artificial sequence
229 <220> FEATURE:
230 <223> OTHER INFORMATION: Synthetic peptide linker sequence
232 <400> SEQUENCE: 5
234 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
235 1                5                10
238 <210> SEQ ID NO: 6
239 <211> LENGTH: 15
240 <212> TYPE: PRT
241 <213> ORGANISM: Artificial sequence
243 <220> FEATURE:
244 <223> OTHER INFORMATION: Synthetic linker peptide
246 <400> SEQUENCE: 6
248 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
249 1                5                10                15
252 <210> SEQ ID NO: 7
253 <211> LENGTH: 20
254 <212> TYPE: PRT

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Input Set : A:\seq list.ST25.txt

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255 <213> ORGANISM: Artificial sequence  
257 <220> FEATURE:  
258 <223> OTHER INFORMATION: Synthetic linker peptide  
260 <400> SEQUENCE: 7  
262 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly  
263 1 5 10 15  
266 Gly Gly Gly Ser  
267 20  
270 <210> SEQ ID NO: 8  
271 <211> LENGTH: 11  
272 <212> TYPE: PRT  
273 <213> ORGANISM: Artificial sequence  
275 <220> FEATURE:  
276 <223> OTHER INFORMATION: Synthetic linker peptide  
278 <400> SEQUENCE: 8  
280 Arg Ala Arg Asp Pro Arg Val Pro Val Ala Thr  
281 1 5 10

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/021,818

DATE: 08/12/2002

TIME: 15:12:03

Input Set : A:\seq list.ST25.txt

Output Set: N:\CRF4\08122002\J021818.raw

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date